



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/747,801	12/22/2000	Colm Prendergast	A0312/7387/MX5	4649
7590	10/22/2004		EXAMINER	
Randy J. Pritzker Wolf, Greenfield & Sacks, P.C. 600 Atlantic Avenue Boston, MA 02210			JAMAL, ALEXANDER	
			ART UNIT	PAPER NUMBER
			2643	

DATE MAILED: 10/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/747,801	PRENDERGAST ET AL.
Examiner	Art Unit	
Alexander Jamal	2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 19 July 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 4-7 and 10-15 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-3,8,9 and 16-21 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 22 December 2000 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Based on applicant's amendment filed 7-19-2004, examiner notes that claims 4-7,10-15 have been cancelled, and claims 16-21 have been added.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1-3,8,9,16-18,20-21** rejected under 35 U.S.C. 102(e) as being anticipated by Bella et al (6115466).

As per **claim 1**, Bella discloses a telephony device that may support various protocols (ADSL/POTS line: ABSTRACT). His device comprises termination impedance circuit 210,230 (Fig. 2) to provide a termination impedance of the device. The impedance is selectable based upon the on/off-hook state of the phone (Col 3 lines 5-45).

As per **claim 2**, the dual mode POTS filter 230 has first and second impedance elements that switchably provide the on/off hook impedances (Fig. 5).

As per **claim 3**, the termination impedance circuit comprises termination capacitors (Fig. 2) in series with the terminating impedance elements 230,210.

As per **claim 8**, Bella's device inherently comprises circuitry to perform hybrid functions for the reason that the modem and phone transmit and receive across the same loop. The selectable POTS filter 230 provides a selectable 'echo cancel characteristic' to the interface (which includes any hybrid circuitry). The selected values of the POTS filter will affect the terminating impedance on the line, and will affect any echo-canceling circuitry at the interface.

As per **claim 9**, the switches of Figs. 3a-3c are a multiplexer with the switchable circuitry forming portions of the plurality of echo-cancel hybrids. Every time the POTS filter 230 switches its terminating impedance, a different hybrid with a different echo cancel characteristic will be selected.

As per **claim 16**, claim rejected for same reasons as claim 1 rejection.

As per **claim 17**, the device response to a 'hook signal' (item 248 in Fig. 2).

As per **claim 18**, in the off-state, the phone is on-hook and the loop impedance is greater. In the on-state, the phone is off-hook and the loop impedance is lower.

As per **claim 20**, the ADSL frequency range is greater than the POTS frequency range.

As per **claim 21**, since Bella's device is functional with the ADSL signaling, the magnitude of the impedance for the ADSL signaling is inherently substantially constant for all frequencies in the ADSL frequency range for the purpose of allowing the data

within the frequency band to be detected accurately (without the large variations in signal amplitude versus frequency).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claim 19** rejected under 35 U.S.C. 103(a) as being unpatentable over Bella et al (6115466).

As per **claim 19**, Bella discloses a terminating device as per claims 1 and 18.

However, Bella does not specify that the magnitude of the impedance is greater than 2000 ohms for on-hook and around 600 ohms for off-hook, and around 100 ohms for the ADSL.

Bella's terminating device is used with a POTS device and ADSL modem. Examiner takes official notice that it is well known in the art that off-hook telephone line termination impedances are 600 ohms, ADSL termination impedances are 100 ohms, and on-hook impedances are greater than about 2000 ohms. This information is disclosed as prior art in applicant's specification page 5. It would have been obvious to one of ordinary skill in the art at the time of this application that the magnitude of the impedance

for the terminating device would correspond to the well-known POTS and ADSL standards for the purpose of being compatible with POTS and ADSL devices.

Response to Arguments

6. Applicant's arguments with respect to claims 1-3,8,9,16-21 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Jamal whose telephone number is 703-305-3433. The examiner can normally be reached on M-F 8AM-5PM.

Art Unit: 2643

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis A Kuntz can be reached on 703-305-4708. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9315 for After Final communications.

Duc Nguyen
DUC NGUYEN
PRIMARY EXAMINER

AJ

October 18, 2004